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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/716,639	11/20/2000	Didier Colavizza	C1190/20006	8287

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SUGHRUE MION, PLLC
2100 Pennsylvania Avenue, NW
Washington, DC 20037-3213

EXAMINER

LAMBERTSON, DAVID A

ART UNIT	PAPER NUMBER
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1636

DATE MAILED: 07/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/716,639

Applicant(s)

COLAVIZZA ET AL.

Examiner

David A. Lambertson

Art Unit

1636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-22, 25-29, 31-35 and 37-53 is/are pending in the application.
- 4a) Of the above claim(s) 20-22 and 25 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 38-40 is/are allowed.
- 6) ☒ Claim(s) 26-29, 31-35, 37 and 41-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Receipt is acknowledged of a reply to the previous Office Action, filed May 13, 2004.

Amendments were made to the claims. Specifically claims 30 and 36 were cancelled.

Claims 20-22, 25-29, 31-35 and 37-53 are pending in the instant application. Claims 20-22 and 25 are withdrawn from consideration. Claims 26-29, 31-35 and 37-53 are under examination in the instant application. Any rejection of record in the previous Office Action, mailed November 14, 2003, that is not addressed in this action has been withdrawn.

Because this Office Action only maintains rejections set forth in the previous Office Action and/or sets forth new rejections that are necessitated by amendment, this Office Action is made FINAL.

Rejection that are Necessitated by Amendment

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 26-29 and 31-33 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims read on a baker's yeast product, which includes chemical compounds such as carbon dioxide (CO₂) and alcohol (ethanol). Because both of these compounds (as well as several additional products made naturally by yeast) are found in nature, the claims read on non-statutory subject matter that does not contain an element of the "hand of man." **This rejection is necessitated by the amendment of the claims to read on a baker's yeast "product" whereas it previously read on a "baker's yeast."**

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following rejections are predicated on the interpretation that a “baker’s yeast product” is any product that is made by a baker’s yeast. This includes natural products, such as carbon dioxide and ethanol. Since carbon dioxide and ethanol have specific chemical structures (CO_2 and $\text{CH}_3\text{-CH}_2\text{-OH}$, respectively), these products will be identical regardless of the yeast strain used to produce them. In other words, the recitation whereby the I-2421, I-2422 and PAD1 deletion yeast strains are used in a cultivation process does not affect the claimed product (e.g., carbon dioxide or ethanol), as this recitation as currently amended represents a product by process. It is further noted that the claims drawn to a product “in the form of a frozen active intermediate dry yeast product” does not specify any particular yeast in the dry yeast product (i.e., the yeast is not necessarily the strain used in the cultivation process for the production of the “baker’s yeast product”). The product as claimed in the previous claims can be carbon dioxide, and carbon dioxide will naturally be present in some amount in all dry yeast cakes, therefore the claims drawn to a product “in the form of a frozen active intermediate dry yeast product” read on any dried yeast composition of the appropriate percentage, as the “baker’s yeast product” will naturally be present therein.

Art Unit: 1636

Claims 26-29, 31-35, 37 and 47-53 are rejected under 35 U.S.C. 102(b) as being anticipated by Goux et al. (AU 609030; IDS reference form May 25, 2001 IDS; see entire document; henceforth Goux). **This rejection is necessitated by the amendment of the claims to read on a baker's yeast "product" whereas it previously read on a "baker's yeast."**

As set forth above, the claims as currently interpreted read on any "baker's yeast product," which includes carbon dioxide. Since baker's yeast naturally produce carbon dioxide during normal respiration, and Goux teaches baker's yeast preparations, Goux inherently teaches the production of carbon dioxide (and therefore, the product itself). Furthermore, the preparations of yeast taught by Goux will also naturally contain carbon dioxide. Since Goux teaches baker's yeast compositions having between 72% and 80% dry matter, as well as between 75% and 78% dry matter (see for example page 4, lines 14-17 and page 7, lines 4-16), Goux anticipates the claims as currently amended.

Claims 26-29 and 31-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Caldwell et al. (US 4,222,972; see entire document; henceforth Caldwell). **This rejection is necessitated by the amendment of the claims to read on a baker's yeast "product" whereas it previously read on a "baker's yeast."**

Caldwell teaches that yeast naturally produces both alcohol and carbon dioxide (see for example column 1, lines 6-11). Since the claims as amended read on any baker's yeast product, and Caldwell teaches that baker's yeast produce carbon dioxide and alcohol, Caldwell implicitly teaches the "baker's yeast products" of carbon dioxide and alcohol.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 26, 27, 32, 34, 35, 37 and 41-53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. **This rejection is maintained for the reasons set forth in the previous Office Action.**

Claims 41-43 (and their dependent claims) remain rejected because the steps required to perform the method remain incomplete, as set forth in the previous Office Action. Specifically, the claims do not recite a positive process step that refers back to the preamble of the claim. In order for the claimed method to be definite in terms of the metes and bounds of the invention, the claim must recite a method step that provides for the result of the methods as claimed. This is because the preamble of the claim does not constitute a method step. Without a step referring to the preamble of the claim, it is unclear if the method has been performed to completion (i.e., it is unclear where the method ends). It would be remedial to add a step referring to the language set forth in the preamble of the claims.

Claims 26, 27, 32, 34 and 47-53 are rejected for the recitation of the term "good general performances." It is noted that the claims have been amended to indicate that good general performances can be measured in terms of the results obtained from the A₁, A₅ and A₆ tests. However, the amendment does not indicate what results are representative of "good general performances." For instance, one of skill in the art would not reasonably be apprised as to whether a result of A₁= 160ml/2hrs would represent a good general performance, versus a result

Art Unit: 1636

of $A_1 = 80\text{ml}/2\text{hrs}$ or $40\text{ml}/2\text{hours}$. In the absence of an indication as to what results in each test are representative of a "good general performance," the term remains indefinite. It is noted that claims 35 and 37, which set forth limits for the results of the A_1 , A_5 and A_6 tests, are not rejected as being indefinite in view of the current amendments. It would be remedial to indicate what result, when obtained in the indicated tests, would be indicative of "good general performances."

Claims 26, 27, 32, 34, 35, 37 and 47-53 are rejected for the recitation of the term "bad taste or off-flavors." This rejection is maintained for the same reasons set forth in the previous Office Actions.

Response to Arguments Concerning Claim Rejections - 35 USC § 112

Applicant's arguments filed May 13, 2004 have been fully considered but they are not persuasive. The following grounds are presented in traversal of the rejections:

1. It is argued that the amendments to claims 41-43 are sufficient to indicate the necessary method steps required for practicing the claimed method (see for example the bottom of page 19 of Applicant's arguments).
2. It is argued that the term "good general performances" is adequately defined in the specification as relating to the fermentometer tests A_1 , A_5 and A_6 . Thus, the claims as amended adequately define the term "good general performances" (see for example page 23, the last paragraph, of Applicant's response).
3. (A) It is argued that the term "bad taste or off-flavors" are not descriptive of personal preferences and dislikes, but are rather used to refer to characteristics that are alien to the normal product; an example of milk as being "off" is presented by applicant (see for example page 24-

Art Unit: 1636

25, the bridging paragraph, of Applicant's response); this is determined by the skilled artisan, who knows the taste and smell profiles that are abnormal to consumers as a collective entity (see for example, page 25, first full paragraph, of Applicant's response). (B) It is argued that the existence of "bad taste and off-flavors" can be determined by a comparison of the decomposition rate of cinnamic acid, which can be determined by chromatographic methods or the presence of styrene in a solution fermented in the presence of cinnamic acid (see for example page 25, second full paragraph, of Applicant's response).

Applicant's arguments have been fully considered but are not found convincing for the following reasons:

1. Although the amendment introduces a method step into claims 41-43, the method remains indefinite because there is no step recapitulating the preamble of the claim. As such, the claim remains open-ended, and it is unclear when the method has been performed to completion. Thus, the amendment has not completely overcome the rejection set forth in the previous Office Action.
2. Although the amendment relates "good general performances" to the fermentometer tests, the tests themselves can give varying results. As such, the tests alone are insufficient to define "good general performances." Rather, it is necessary to indicate what results, when achieved in the tests, are representative of "good general performances." For example, it is noted that in claim 37, where test results of 170ml to 190ml per 2hrs for the A₁ test, 110ml to 130ml per 2hrs for the A₅ test, and 115ml to 140ml per 2hrs for the A₆ test are given as representing "good general performances," there is no indefiniteness rejection. This is because the skilled artisan

Art Unit: 1636

can ascertain what the boundaries are for the test results to indicate “good general performances” of the yeast. Thus, the current amendment is insufficient to define “good general performances.”

3. (A) The argument that “bad tastes or off-flavors” are not personal preferences but rather a matter of factual evidence, is not convincing. An individual determines something to have a bad taste based entirely on their personal preference, as many individuals have conflicting views on what has a good or bad taste. For instance, one individual may like the taste of mayonnaise, while another individual may expound that it has a “bad taste” (Notably, this is regardless of the decomposition of cinnamic acid). This is also true with regard to the “milk example” provided in the argument above; one individual may not dislike a certain level of bacterial contamination of milk, thereby not considering the milk as “off” while another individual will consider the milk “off” because they are more sensitive to the presence of bacterial contamination. This is indeed a matter of personal preference. (B) While the decomposition of cinnamic acid can give rise to “bad tastes or off-flavors,” this is not the sole source of “bad taste or off-flavors.” Because the specification does not clearly indicate in the instant specification that “bad taste or off-flavors” are necessarily the result of the decomposition of cinnamic acid, and the claims do not adequately define the terms “bad tastes or off-flavors” as having such a meaning, the terms must be interpreted broadly as including personal preferences. Since personal preferences are variable among each individual, there are no clear boundaries as to what has a good taste versus a “bad taste.” Thus, in the absence of a clear indication in the claims that the definition of “bad tastes or off-flavors” is the result of the decomposition of cinnamic acid, the claims remain indefinite.

Art Unit: 1636

Allowable Subject Matter

Claims 38-40 are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

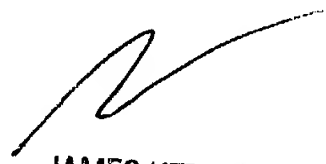
Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A. Lambertson whose telephone number is (571) 272-0771. The examiner can normally be reached on 6:30am to 4pm, Mon.-Fri., first Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Remy Yucel, Ph.D. can be reached on (571) 272-0781. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1636

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David A. Lambertson, Ph.D.
AU 1636



JAMES KETTER
PRIMARY EXAMINER